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APPLICANT: SONY CORP;

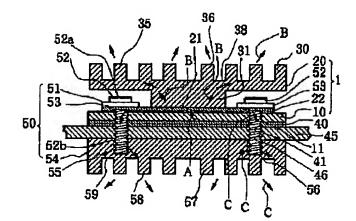
INVENTOR: FUJITA HIROYUKI;

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TITLE

PACKAGE MOUNTING STRUCTURE



ABSTRACT:

PURPOSE: To double the heat dissipation efficiency and cooling efficiency of package by dissipating the heat, generated from a packaged semiconductor, from a first heat dissipating part to the surface side and from a second heat dissipating part mounted on the rear of a printed board through a through hole to the rear side of the printed board.

CONSTITUTION: Heat generated from an IC in an LGA package 1 is transmitted to a heat plate 21 at a heat sink 20 and a part of the heat B is transmitted to the fin 30 side and to the fin 35 from a fixing part 31. The heat is dissipated efficiently from the upper face, side . face and bottom face of the fin 35. On the other hand, the heat C other than the heat A transmitted to the heat plate 21 is transmitted from a thermally conductive retainer 53 at a thermally conductive part 51 to a thermally conductive screw 52 thence to the heat sink 54 side through the groove 52b. The heat is transmitted from a fixing part 55 to fins 57 and dissipated efficiently to the outside. This structure sustains the operating characteristics of semiconductor and enhances the reliability.

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